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L3 ANSWER 15 OF 16 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:15500 CAPLUS
DN 132:220058
TI NELL-1 enhances mineralization in fetal calvarial
osteoblastic cells
AU Kim, David; Soo, Chia; Zhang, Xinli; Park, Howard; Wang, Yubert; Longaker,
Michael T.; Ting, Kang
CS Departments of Surgery and School of Dentistry, Section of Orthodontics,
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SO Surgical Forum (1999), 50, 599-601
CODEN: SUFOAX; ISSN: 0071-8041
PB American College of Surgeons
DT Journal
LA English
AB The association of NELL-1 expression with bone formation
and mineralization of the calvarial osteoblast-like cells was studied.
NELL-1 mRNA was faintly expressed from day 14 of
gestation with mild increase over the gestation period. Both primary rat
fetal calvarial cell cultures and MC3T3 cell cultures overexpressing
NELL-1 showed an increase in mineralization. Mouse cDNA
array results from NELL-1-infected MC3T3 cells showed
the expression modulation of the genes related to bone formation and
craniofacial development: downregulation in BMP-7 gene expression and
upregulation of Split Hand and Foot gene.

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